

Min Chong, Task Lead, CAC-BWG **DoD BMO / ISS**



Purpose

To provide an overview of the DoD Common Access Card- Biometrics Working Group's (CAC-BWG) efforts in pursing the inclusion of biometrics technology with the CAC.





Agenda

- 1. Background
- 2. CAC-Biometrics Technology Demonstrations
- 3. Road Ahead



1. Background



CAC

CAC is a Smart Card that serves as...





Personnel Identification

Replaces the "ID" Card

Building Access









Systems & Network Access with PKI Application Provides:

- Digital Signature
- Data Encryption

2. CAC-Biometrics Technology Demonstrations



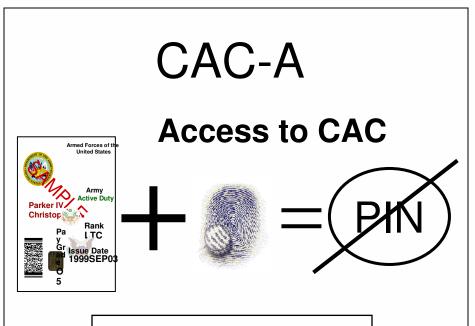
CAC and Biometrics Technology Demonstrations

- The CAC-BWG is pursuing the inclusion of biometrics technology, on or with the CAC
- The strategy to achieve a DoD Enterprise CAC-Biometrics solution is a two-phased approach
 - Phase I: Technology Demonstrations
 - Phase II: Demonstrate suitable Enterprise Solution
- The three Technology Demonstration Concepts are:
 - 1. CAC-A: Biometrics/PIN
 - 2. CAC-B: Template on CAC Application
 - 3. CAC-C: Contactless with CAC





Technology Demonstration CAC-A (Biometric/PIN)



Biometrics as an Alternative to the PIN

- CAC-A focused on development of four scenario proof-of-concept
- Phase I of CAC-A has two distinct parts:
 - Part 1: contractor teams to develop biometrics solutions
 - Part 2: DMDC develops an applet ("Access Control Applet") that supports a generic/non-proprietary
 PIN/key solution





Technology Demonstration CAC-A (Biometric/PIN) (cont.)

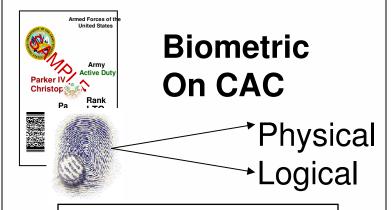
- The four scenario concepts are:
 - 1. Store biometrics template on server and perform match operation on server
 - 2. Store biometrics template on workstation and perform match operation on workstation
 - 3. Store biometrics template on the CAC and perform the match operation on the server
 - 4. Store biometrics template on the CAC and perform the match operation on the CAC





Technology Demonstration CAC-B (Template on CAC Application)

CAC-B



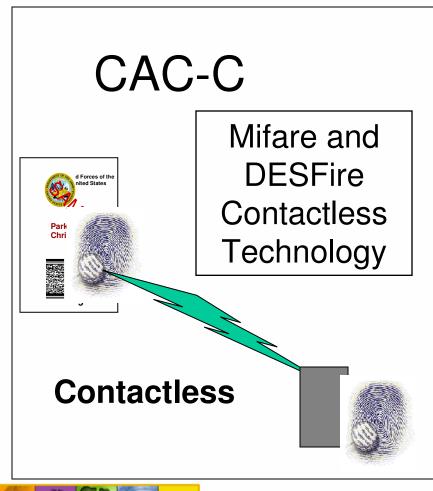
The CAC as a carrier for the Biometrics

- CAC-B is a follow on effort from CAC-A Scenario 3
- CAC-B focuses on placing the Biometric Attribute Certificate on the CAC
 - Logical Access
 - Physical Access
- Coordinating approval process for Phase II





Technology Demonstration CAC-C (Contactless with CAC)



- CAC-C focuses on three biometrics contactless solution:
 - Physical Access System
 - Portable Physical AccessSystem
 - Physical Access System that uses a turnstile
- Goal of CAC-C is to provide an interoperable contactless physical security solution
- Evaluation in progress



3. Road Ahead



CAC-A/B Phase II Efforts

- Merge CAC-A and B into one Phase II effort
- CAC-A/B Phase II Effort is a three part process
- Part 1: Concept Exploration
 - Match-On-Card Capability
 - Match-Off-Card Capability
- Part 2: Technology Development
 - Develop Prototype Capability
- Part 3: Initial Operating Capability
 - Develop Target IOC System
 - Demonstrate Integration and Interoperability





Summary

- Biometrics on or with the CAC may open the door to enterprise use of biometrics throughout the DoD
- The use of CAC with the biometrics authentication capability is vital to achieving a secure Information Assurance posture for the Defense Information Infrastructure

